



The

# GARzette

The Official Newsletter of the Gwinnett Amateur Radio Society  
May 2020 <http://www.gars.org/> Volume 29, Issue 5



## Online GARS Meeting: Practical Camouflage Techniques & Rate your Coax



by Kevin Scott, K4GTR, Tuesday, May 12, 2020 7:00 pm

# Message from the President

It has been at least six weeks of pretty much staying at home time for most of us and how is everyone fairing. A lot has changed since COVID-19 took over the news and our daily lives. For some of us, we continued to go to work. Others discovered the joy and peril of working from home. Many just continued to live at home with restrictions on going out. For all of us, it has been different.

While we experienced a mad rush for toilet paper in the stores, many learned how to use DoorDash or UberEats for delivery instead of going out to eat. Major Amateur Radio events were cancelled including Dayton Hamvention and the Atlanta Hamfest. One thing that kept us sane was that the Internet did not crash even with the greatly increased load for all the stay at home activities. Life has definitely changed this Spring and may change the way we do many things going forward.

We have adapted with some changes for GARS with online meetings. Our April meeting was attended by 51 people, down a bit from our regular "in-person" meetings but presented an opportunity to get together and share club business and a program for many of us. The April workshop was also online. Online meetings and programs will continue through May and we'll see how things are opening back up in June.

Speaking of June, the Officers and Executive Committee is already looking ahead to late June and Field Day. While



"Life has definitely changed this Spring and may change the way we do many things going forward."

there are no definite plans yet, we are closely watching if parks and other activities will open back up in June. We are also considering other options for Field Day. As the ARRL has suggested, we can operate from the home shacks as individual stations as many do each year. If Harbins Park or an alternate site

become available, we could also scale down from an 8A station to something less with fewer stations. Also under consideration is operating some remote stations

from the Field Day location so operators can get on the air as W4GR from the comfort and safety of home. At a minimum, things will change from previous years, but we are exploring options for Field Day.

While we are still at home or for those who are getting out, let's get on the air! Look for more updates on club plans on our usual nets, the GARzette, Facebook and at [gars@groups.io](mailto:gars@groups.io). Until we meet again (either in person or virtually)...

73,

**WB4QDX, Club  
President**

A handwritten signature in black ink, appearing to read "John Adams".

***"It is not the class of license the Amateur holds, but the class of the Amateur that holds the license."***

[Author Unknown]

# GARS May Meeting and Workshop

## Practical Camouflage Techniques & Rate your Coax

by Kevin Scott, K4GTR

Tuesday, May 12, 2020 7:00 pm

## How to program radios with CHIRP

by Dallas Mellichamp, KD4HNX

Tuesday, May 19, 2020 7:00 pm

**GARS Meetings and Workshops  
will be held online until further notice.  
See <http://www.gars.org> for more information.**

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### **GARS Communications**

<b>2 Meter Repeaters</b> 147.075(+) MHz Tone 82.5 147.255(+) MHz Tone 107.2	<b>6 Meter Repeater</b> 53.110 (-1 MHz) No Tone (Offline for Maintenance)
<b>1.25 Meter Repeater</b> 224.580(-) MHz Tone 100.0, 1.6 MHz Offset	<b>Other Resources:</b> <u>APRS</u> 144.390 -- 1200 Baud W4GR
<b>70 Cm Repeaters</b> 444.525(+) MHz Tone 82.5 442.100(+) MHz Tone 100 442.325(+) MHz Tone 100	<b>D-STAR</b> <u>WD4STR</u> 145.060 + (1.4 MHz) 440.550 + (5 MHz)

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The *GARzette* is the official monthly newsletter of the Gwinnett Amateur Radio Society, serving its members and other persons interested in the advancement of the Amateur Radio art.

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If possible, bring your articles to the monthly meeting in Microsoft Word or rich text (.rtf) or text or HTML format or by e-mail to [editor@gars.org](mailto:editor@gars.org). Artwork can be accepted in most any graphics format and can be submitted via e-mail to the same address. Alternate means of submittal can be arranged when necessary.

In keeping with the Amateur Radio spirit, permission is hereby granted for the reproduction of The *GARzette* articles by other Amateur Radio club newsletters provided that proper credit is given to the individual author and *The GARzette*.

*The GARzette* is published each month with the assistance of Norm Schklar, WA4Z XV who prints copies for distribution at meetings, etc. and Dave Bruse, W4DTR, who distributes the news letter electronically.

Deadline for submissions is the 28th of each month for inclusion in the following month's issue.

For additional information view our Website at: <http://www.gars.org>

Newsletter Editor: [editor@gars.org](mailto:editor@gars.org) Bill Eggers—WB2RIS 470-238-9603



# GARS Happenings

## 20 25 Years ago in the May 2000 GARzette:

(No May 2000 GARzette was available, so we will go further back in time to the May 1995 edition)

- The GARS "Ham of the Month" is Charles Robison, AD4MI;
- GARS demonstrates Amateur Radio at the George Walton Academy (thank you notes from the kids included);
- Cheryl McClure, KS4PP, shows us how to make it to 20 WPM without losing your mind;
- Larry Osborne, KD4QFD, thanks members for their participation in "Ham Radio '95";
- The GARS / Alford club joint picnic is scheduled for July 22 at Fort Yargo State Park;
- The GARS demonstration of amateur radio at a local Sam's Club was a success;
- A GARS portable tower is complete and ready for service;
- The May GARS meeting will be held at Captain Billy's Seafood on Pleasant Hill Rd, West of the Gwinnett Place Mall.



You can always browse the GARzette archive at <http://www.gars.org/newsletters>

73, *Bill*, WB2RIS, GARzette Editor



# THANK YOU

**To Our Doctors, Nurses, First Responders,  
and Public Safety Officers On The Front Lines**

## GARS HELP WANTED

- GARzette Editor — Looking for someone to become the next GARzette Editor, starting off as a GARzette Committee member / Assistant Editor. Experience with Microsoft Publisher would be nice, but any experience with Microsoft Office products is helpful. You will be trained in the use of Microsoft Publisher. Most of the content is supplied by others, but occasionally you may wish to write content, especially in your area of expertise. If you are interested, please contact Bill Eggers, WB2RIS at [editor@gars.org](mailto:editor@gars.org).

If you're interested in volunteering for one of these positions, please contact one of the GARS Officers. Supporting GARS activities is an important part of what we do and help from club members is needed.

[PS— Articles to publish in the GARzette, either written by GARS members or published elsewhere, are always welcome. —Ed.]

# GARS Happenings (Cont'd)

## GA QSO Party

The 2020 Georgia QSO Party marked the 60th anniversary of the state-wide event, and this year stood out not just due to the 60th anniversary, but also due to the unique challenges presented by the COVID-19 pandemic. Instead of originally operating onsite at Gwinnett Fire Station #31, the club was forced instead to operate from our home QTHs due to the shelter-in-place orders during Saturday instead of what was originally planned to be both a Saturday and Sunday event.

We had 15 operators this year operating from their home QTH, and in alphabetical order, our operators were: ND4V, K4GRT, KA4KKF, KD4HNX, KJ4CNC, KK4NJM, KX4HA, N0DIM, N4NQ, W3DJS, WA4HNL, WB4QDX, WD4JEM, WK2Y and WR1TR.

During the entire event, as a group, we made 1092 phone contacts, 429 CW contacts and 392 Mixed contacts. We also submitted our logs to the state Georgia QSO Party website under the club name, "Gwinnett Amateur Radio Society" in order to qualify for recognition at the state level.

During the next GARS Club meeting which we hold in person, the GARS Club awards for most Phone contacts, most CW contacts, and most Mixed contacts will be presented to those operators.

The next Georgia QSO Party will be held on the weekend April 10th - April 11th, 2021, and we hope to be able to resume normal operations back at Fire Station #31, and also to allow individual operators to also operate from their Home QTH in order to boost the club scores on the state website.

Thank you to all who operated during the 2020 event, and we look forward to operating again next year!

73, Dave W3DJS

## Field Day Status

As Field Day 2020 approaches, we are waiting on whether the pavilion will open for large crowds (over 10 people). GARS will follow all guidelines and provide wipes and spray for hands. Keyboards, mice, radios, headsets, keys, microphones should be wiped down when you sit down at a station and when you leave a station. This is an emergency operation for communications. Field Day has always been an emergency operation test since the beginning. This year will test our preparedness to operate under stressful conditions. If you are sick or feel you are getting sick please do not show up at the site. We want all GARS members to have a chance to operate and make future Field Days.

We have checked the rules and only the transmitters and antennas have to be within the 1000 foot diameter circle. Research is being done on possibility of running with a crew and giving operators remote logon to the equipment to operate. There are several ways this can be done and a central chat window or phone number for information. The band captains from last year will be given the chance to provide equipment. SSB and digital look like the easiest to get going. The CW stations will be a challenge.

The controlling computer will need to run N3FJP logging software and have CAT control plus audio in and out to the internet, no screen saver, sound card interface, TeamViewer etc..

We have been working on several possibilities. The only problems I see is no control operator if you are not General or above. Questions that will need to be answered:

- 1) Should we have all stations setup for remote?
- 2) Should just 2 CW and 2 SSB be setup for remote operation, leaving 2 SSB & 2 digital stations running local at the site?
- 3) 8A, 6m/satellite, No GOTA.
- 4) Call sign should be verified for remote operation.

If a lot of states don't open up, the bands will probably be crowded with a lot of 1E stations. Again all this depends on the parks opening up the pavilions and if you come out to Field Day. If the parks do not open up for Field Day, I suggest the following:

- There will not be a W4GR station on the air. All members should use their own call sign to participate. Operations shall be according to your license class.
- Check out <http://www.arrl.org/field-day>
- Novice and Techs can operate 10m SSB and 15m, 40m, 80m CW.
- Groups of 2-4 people could operate from one's house, if all parties are comfortable with the crowd.(3's company / 4's a crowd)
- Download rules from ARRL web site.
- Rule 4.6. (Class D) Home stations: Stations operating from permanent or licensed station locations using commercial power. Class D stations may only count contacts made with Class A, B, C, E and F Field Day stations.
- Rule 4.7. (Class E) Home stations - Emergency power: Same as Class D, but using emergency power for transmitters and receivers.
- Class E may work all Field Day stations.

### A few words from the ARRL about Field Day:

Social distancing and state and local requirements very likely will impact just how — and even whether — we are able to participate in Field Day this year. ARRL continues monitoring the coronavirus situation, paying close attention to information and guidance offered by the Centers for Disease Control and Prevention (CDC). If social distancing means that Class A with a 30-member team set up in a city park won't work this year, then it's time for a Plan B. Part of the Field Day concept has always been adapting your operation to the situation at hand. At its heart, Field Day is an emergency communication demonstration. Field Day rules are flexible enough to allow individuals and groups to adjust their participation and strategies in a way that still addresses their needs while being fun.

The main thing to take away from this, is stay tuned and be ready to move on a moment's notice. More to come. 7 weeks and counting. Decisions may run right up to June 19th.

73, David, KA4KKF

# In Other News

## Socially Distanced In-Person Exam Sessions Held in US and Norway

With some states starting to relax restrictions on events and activities, the Grant County, Oregon, Amateur Radio Emergency Service (ARES®) held an in-person exam session on April 26 in the town of John Day that adhered to social distancing recommendations. Exam organizers held the gathering to within Oregon's 10-person limit for gatherings, keeping everyone 6 feet apart and requiring all participants to wear face masks. The exam session was held outdoors under a car port.

"We had an exceptionally successful test session, with candidates passing exams at every amateur radio level," said Ed Ellesson, AF7YX, the ARRL Volunteer Examiner Liaison for the Grant County Amateur Radio Club. Grant County Emergency Coordinator Steve Fletcher, K7AA, noted that many clubs had canceled their planned sessions due to the coronavirus pandemic. "Grant County decided to approach the problem by obeying all the restrictions but still holding the exam," he said. "As a result, we had people come here from all over the state."

In Oklahoma, the Mid-Del Amateur Radio Club, W5MWC, administered an open-air exam session on April 25 that held to social distancing guidelines. Over the course of the 3-hour session, 16 candidates tested and all were successful. One candidate passed all three exam elements to come away with his Amateur Extra-class license.

Another open-air amateur exam session took place recently in Norway. The LA3F radio amateur club south of Oslo had just completed its annual course for prospective radio amateurs, and three candidates were ready to take their exam when Norway began shutting down activities and gatherings due to the coronavirus pandemic.

Not to be deterred, International Amateur Radio Union Vice President Ole Garpestad, LA2RR, arranged with Norwegian regulatory authorities to hold an outdoor exam session compatible with the social distancing and other safety guidelines in place. Garpestad met with the three candidates in the forest outside a local scout cottage, and, with candidates seated at tables at least 5 meters (about 16 feet) apart, he administered the exam. With the temperature at around 10 °C (about 50 °F), everyone dressed warmly. Garpestad reported that all three candidates passed, and LA5EUA, LB8QI, and LB8RI were welcomed to the world of amateur radio. — Thanks to Steve Fletcher, K7AA, and Don Beattie, G3BJ, via IARU Region 1

Source: <http://www.arrl.org/news/socially-distanced-in-person-exam-sessions-held-in-us-and-norway>



A recent test session in Grant County, Oregon, followed social distancing guidelines



One of the successful candidates at an al fresco exam session held by the Mid-Del Amateur Radio Club in Oklahoma

# The History of the Car Radio

**Seems like cars have always had radios, but they didn't. Here's the true story:**

One evening, in 1929, two young men named William Lear and Elmer Wavering drove their girlfriends to a lookout point high above the Mississippi River town of Quincy, Illinois, to watch the sunset. It was a romantic night to be sure, but one of the women observed that it would be even nicer if they could listen to music in the car.

Lear and Wavering liked the idea. Both men had tinkered with radios (Lear had served as a radio operator in the U.S. Navy during World War I) and it wasn't long before they were taking apart a home radio and trying to get it to work in a car. But it wasn't as easy as it sounds:

Automobiles have ignition switches, generators, spark plugs, and other electrical equipment that generate noisy static interference, making it nearly impossible to listen to the radio when the engine was running.

One by one, Lear and Wavering identified and eliminated each source of electrical interference. When they finally got their radio to work, they took it to a radio convention in Chicago. There they met Paul Galvin, owner of Galvin Manufacturing Corporation. He made a product called a "battery eliminator" a device that allowed battery-powered radios to run on household AC current. But as more homes were wired for electricity, more radio manufacturers made AC-powered radios.

Galvin needed a new product to manufacture. When he met Lear and Wavering at the radio convention, he found it. He believed that mass-produced, affordable car radios had the potential to become a huge business.

Lear and Wavering set up shop in Galvin's factory, and when they perfected their first radio, they installed it in his Studebaker. Then Galvin went to a local banker to apply for a loan. Thinking it might sweeten the deal, he had his men install a radio in the banker's Packard. Good idea, but it didn't work - Half an hour after the installation, the banker's Packard caught on fire. (They didn't get the loan.)

Galvin didn't give up. He drove his Studebaker nearly 800 miles to Atlantic City to show off the radio at the 1930 Radio Manufacturers Association convention. Too broke to afford a booth, he parked the car outside the convention hall and cranked up the radio so that passing conventioneers could hear it. That idea worked -- He got enough orders to put the radio into production.

## WHAT'S IN A NAME?

That first production model was called the 5T71. Galvin decided he needed to come up with something a little catchier. In those days many companies in the phonograph and radio businesses used the suffix "ola" for their names - Radiola, Columbiola, and Victrola were three of the biggest. Galvin decided to do the same thing, and since his radio was intended for use in a motor vehicle, he decided to call it the Motorola.

But even with the name change, the radio still had problems: when Motorola went on sale in 1930, it cost about \$110 uninstalled, at a time when you could buy a brand-new car for \$650, and the country was sliding into the Great Depression. (By that measure, a radio for a new car would cost about \$3,000 today.) In 1930, it took two men several days to put in a car radio. The dashboard had to be taken apart so that the receiver and a single speaker could be installed, and the ceiling had to be cut open to install the antenna. These early radios ran on their own batteries, not on the car battery, so holes had to be cut into the floorboard to accommodate them. The installation manual had eight complete diagrams and 28 pages of instructions.

## HIT THE ROAD

Selling complicated car radios that cost 20 percent of the price of a brand-new car wouldn't have been easy in the best of times, let alone during the Great Depression. Galvin lost money in 1930 and struggled for a couple of years after that. But things picked up in 1933 when Ford began offering Motorola's pre-installed at the factory. In 1934 they got another boost when Galvin struck a deal with B.F. Goodrich tire company to sell and install them in its chain of tire stores. By then the price of the radio, installation included, had dropped to \$55. The Motorola car radio was off and running. (The name of the company would be officially changed from Galvin Manufacturing to "Motorola" in 1947.)

In the meantime, Galvin continued to develop new uses for car radios. In 1936, the same year that it introduced

(Continued on page 12)

# Gwinnett ARES Highlights

By Karen Whited, AB4NW

Meetings are held the 4th Tuesday at 7:30 pm at the EOC on Hi Hope Road. If you are interested in emergency communications, contact Hall Collier W4IGE at [w4ige@arrl.net](mailto:w4ige@arrl.net).



## AMERICAN RED CROSS OPERATOR SKILLS

By Mark Bell N7GRB  
AEC for Public Health

ARC chapters across the country are adopting a flash drive-based disaster message utility. An ARC member plugs the flash drive into their laptop, runs the message utility, chooses any one of several standard ARC message templates, and enters their message content.

Once the data entry is complete, the message content is exported to a text file on the flash drive, then presented to the radio operator. The radio operator attaches the text file to a Winlink message and transmits following standard Winlink Express procedures.

Several benefits of the ARC message utility are:

- Message forms are standard within the ARC community.
- Transcription errors are eliminated. The radio operator is no longer transcribing the agency message.
- Work flow is improved. There is no delay brought about by a radio operator taking time to transcribe the message.

Congratulations to Gwinnett ARES members David Adcock KA4KKF, Charlie Allport WS4TOT, Jamie Burns KX4HA, Bill Hawkins WR1TR, Russell Prevost AB4QQ, Karen Whited AB4NW, Larry Whited AB4NX, and Glen Wendt W3WWT, as well as instructor Mark Bell N7GRB.

The radio operator skills these individuals have obtained will better position Gwinnett ARES to support the local Red Cross chapter as the chapter adopts usage of the ARC Message Utility.

Committed to our Community  
When All Else Fails



## MEMBER PROFILE: LEE STONE KT4LS

Lee lives in Peachtree Corners and is originally from Monticello. He is married to Katrina and has a stepson, Ben, 31, who is a licensed architect

living in Birmingham. Lee earned a BS in industrial management from Georgia Tech. He currently works for Ametek as their message center manager where he maintains server hardware, network equipment, and supporting applications that process over 3 million alarm messages per day. He previously worked in the motorcycle industry, telecom, and IT where he held various positions ranging from department coordinator to executive VP.



Lee earned his license at a 2012 GARS Ham Cram and has been a GARS and ARES member for seven years. He is also a member of the North Fulton Amateur Radio League. His radios include a Yaesu FTDX-3000, Yaesu FT-450D, Yaesu FTM-400D, Yaesu FT-8800, and FT-8900. His antennas are an 80m full wave loop, 80m-10m dipole, 60m dipole, 10m-12m-15m-17m-20m cobweb antenna, and two VHF antennas. Lee holds the state ARES position of *Assistant Section Emergency Coordinator, Operations*.

Lee enjoys having the opportunity to find challenges in the amateur radio hobby, new digital modes, building and modifying antennas, and working with other operators in ARES. He also enjoys contesting and making contact with special event stations. His other hobbies are photography and watercolor. His goal is to improve his photography skills to beyond using an expensive camera to take snapshots and to create paintings from the photographs.

## APRIL VIRTUAL MEETING April 28

D-RATS training was done by John Davis WB4QDX. In addition, Lee Stone KT4LS, *Assistant Section Emergency Coordinator-Operations*, and Don Coltrane KJ4UC, *Assistant Section Emergency Coordinator-ARES MAT*, gave an overview of the Red Cross drill to be conducted on May 30. Over 20 states will participate.



[This will be Karen's last ARES article. I would like to thank her for her nice articles for the GARzette! - Ed.]

# Net Managers Corner

## Monday Night 2 Meter “Want, Swap, Sell, and Information Net”

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### GARS NEEDS MEMBERS TO SERVE AS NET CONTROL STATIONS!

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**GARS is a great Amateur Radio service club** and we have the membership and awards to prove it. Our club is a very busy and active club and we use the Monday night net to get the information out to our members. Weekly participation is needed to make our net function well. There is only a small group of very dedicated people that make the net happen each week, and we need more members to volunteer to serve as Net Control Stations (NCS) on a rotating basis.

Out of almost 300 members, there are only SEVEN primary people who serve as NCS for the GARS net every Monday night. In no particular order, they are:

Don - KW4AL	Ray - N4GYN	Bill - KK4AUA
David - KA4KKF	Kevin - KK4WOG	Chuck - KK4TKJ
Russell - AB4QQ		

As GARS Net Manager (Chuck KK4TKJ), I really need 26 people to fill NCS positions. I do plan and post the schedule months in advance. Any conditions will be accommodated that you as a rotating NCS need to place on the scheduling of your duties. If your plans change, I can make adjustments for the schedule to work, and I will make those changes happen as soon as I am notified of a problem. As Net Manager, I also send out reminders each week to let the NCS scheduled know he or she is NCS for the next Monday night net. In short, serving as a rotating NCS is a small duty but a great contribution to the club.

The “Want, Swap, Sell Information Net” begins promptly at 19:30 every Monday night and runs about 45 minutes. As a scheduled NCS, you will request the assistance of a volunteer alternate NCS each time you have Net Control. Your simple duties will be to tune in to the GARS repeater, read the script, take a few notes and forward the information to me for record keeping.

Please lend a hand and contact me at [KK4TKJ@arrl.net](mailto:KK4TKJ@arrl.net). Sign up to help support the effort that makes GARS the great club that it is.

73 and see you on the Nets!

*Chuck McCord, KK4TKJ*

GARS Net Manager

# GARS Membership Page

## New GARS Members in April

**Nathanael Smith (W4GOP)  
James Vanterpool (KO4DEC)**

## New Members: 2

**Total Members as of April 30, 2020  
350**

**Join GARS members for our weekly breakfast gathering at 7:30 AM most Saturdays  
at**

**Golden Corral  
2155 Riverside Parkway  
Lawrenceville, GA 30043**

**(Suspended until further notice)  
[\(Directions\)](#)**

**The following members are celebrating birthdays in May:**

**HAPPY BIRTHDAY!!  
From All of Us at GARS**

**Charles Allport (WS4TOT)  
Timothy Atkin  
Bill Bentley (KJ4MXM)  
Caryn Brant  
Maggie Colley (KM4PTW)  
Steve Garrison (N4TTY)  
Bill Grimes (WG9NUW)  
David Griscavage (W3GZS)  
Phyllis Harden (KN4AEZ)  
Bill Hawkins (WR1TR)  
Sachiko Londono  
Sandy Lovelace (KF4BUW)  
Gregory Mann (KM4RKT)  
Brandon Massengill (W4HDX)  
David Mattison (KD4PCK)  
Delmar Mc Cue (K0DCM)  
Dallas Mellichamp (KD4HNX)  
Anita Morris (KG4AJX)  
Robert Prisant (KN4GZG)  
Kimberley Romero  
Ted Ruchalski (KK4DFM)  
Adrian (Ade) Shamblin (KJ4CUY)  
Nathan Smith (W4GOP)  
Larry Thill (W4LJT)  
Brad Wagner (N4BEW)  
Gloria Wilson**

## GARS MEMBERSHIP

Your current GARS membership status is shown in the monthly newsletter e-mail towards the bottom of the message.

To become a GARS member, or to renew your GARS membership, please visit our website—<http://www.gars.org>

To make changes to your GARS membership (moved, new e-mail address, new phone number, etc.), please e-mail the Membership Committee - [membership@gars.org](mailto:membership@gars.org)

You can **renew or update** your Amateur Radio license information with the FCC at their website for free <http://wireless.fcc.gov/uls/index.htm?job=home>

To update your ARRL information, please visit their website - <http://www.arrl.org>

Membership Chair: Karen Albritton, KI4HPP  
Committee Members: Dave Bruse, W4DTR, Pam Meridy, WB1AKQ,  
Ivette Santiago, KN4OYE , Cathy Kelley, KN4DML

## EXTRA! EXTRA!

### Repeater Status

6M	currently down
147.075	Operational in Snellville
147.255	Operational in Snellville
224.580	Operational in Grayson
442.100	Operational at Goshen Springs
442.325	Operational in Buford
444.525	Operational in Snellville

Link remote receivers being added

### Donating to GARS

Your GARS donation can be used for a certain purpose by donating to one of these funds:

- GARS SK Memorial Fund for Education (to remember and honor Silent Keys);
- GARS Scholarship Fund (Administered by the ARRL for awarding scholarships);
- GARS General Fund (any club purpose).

GARS has joined these rewards programs (a portion of every purchase you make through these merchants may be donated to GARS):

- Amazon Smiles;
- Kroger Community Rewards program.

For more information on how to sign up for these rewards programs, or to donate to GARS, visit  
<http://gars.org/gars/donations-to-the-club>

### GARS on Social Media

GARS has moved to Groups.io!



Join GARS on Groups.io:  
<http://gars.org/groups.io>



Visit GARS on Facebook:  
<http://gars.org/facebook>



Follow GARS on Twitter:  
<http://gars.org/twitter>



Join GARS on YouTube:  
<http://gars.org/youtube>

### G A R S Volunteers

### OFFICERS

John Davis, President	WB4QDX	
Sandy Jackson, Vice President	KJ4DRO	
Joe Biddle, Secretary	AD4PZ	
Pam Meridy, Treasurer	WB1AKQ	
Randy Collins, Program Manager	N4COR	

### MANAGERS/COMMITTEE CHAIRS

Karen Albritton, Membership Chair	KI4HPP	
Dave Bruse, VE Team Leader	W4DTR	
David Adcock, Webmaster and Field Day Chair	KA4KKF	
Ralph Pickwick, Apparel Manager and Education Chair	KJ4CNC	
Glen Wendt, TechFest Chair	W3WWT	
Bill Eggers, GARzette Editor	WB2RIS	
Eddie Foust, Repeater Chair	WD4JEM	
Mike Weathers, WAS / DXCC QSL Card Checker and Historian	ND4V	
Chuck McCord, Net Manager	KK4TKJ	
Mike Swiderski, Technical / RFI Advisor	K4HBI	
Joe Biddle, Winter Field Day Chair	AD4PZ	
Kyle Albritton, Multimedia Chair	W4KDA	
Don Stewart, Elmer Manager	KW4AL	
Dave Slotter, Georgia QSO Party Chair, Workshop Leader and Public Information Officer	W3DJS	

### DIRECTORS AND TRUSTEES

Kyle Albritton, W4KDA		Rick Cobb, N4XYY	
Mike Weathers, ND4V		Bill Cherepy, WB4WTN W4GR Trustee	

## GARS MEETING AND WORKSHOP MINUTES

Gwinnett Amateur Radio Society  
GENERAL Meeting Minutes  
4/14/2020

**President John Davis (WB4QDX) and Opened the meeting at 7:00pm and Closed the meeting at 7:40pm**  
**(Covid-19 Alternative Online)**

**Introductions and Visitors:** Visitors were recognized with [ ~15 ] in attendance.

**Treasurer Report:** Pam Meridy (WB1AKQ) – John read the financial report.

**Membership Report:** Karen Albritton (KI4HPP) John reported that Membership is at [ 344 ].

**Programs:** May – TBD

**GARS Workshop** - Dave (W3DJS) outlined the next

workshop session's format coming up:

**GARS Education** – Ralph (KJ4CNC) mentioned:

- Mason Elementary School STEM Event set to March 25<sup>th</sup> & 26<sup>th</sup> was cancelled.
- McConnell Middle School has been given ARISS schedule to April 6<sup>th</sup> or 7<sup>th</sup> is postponed until TBD.

**Georgia QSO Party** - Dave (W3DJS) announced that this contest will still be **April 11<sup>th</sup>** and due to the Covid-19 situation, everyone is to stay at home and make contacts for GARS if you choose. Additional instructions are forthcoming.

**Program** – **Programming your Radio** by John Davis (WB4QDX)

Submitted by: Joe Biddle (AD4PZ) GARS Secretary

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(No April Workshop minutes available)

*(The History of the Car Radio, continued from page 7)*

push-button tuning, it also introduced the Motorola Police Cruiser, a standard car radio that was factory preset to a single frequency to pick up police broadcasts. In 1940 he developed the first handheld two-way radio, the "Handie-Talkie" for the U. S. Army.

A lot of the communications technologies that we take for granted today were born in Motorola labs in the years that followed World War II.

In 1947 they came out with the first television to sell under \$200.

In 1956 the company introduced the world's first pager;

in 1969 it supplied the radio and television equipment that was used to televise Neil Armstrong's first steps on the Moon.

In 1973 it invented the world's first handheld cellular phone. Today Motorola is one of the largest cell phone manufacturers in the world.

And it all started with the car radio.

Whatever happened to the two men who installed the first radio in Paul Galvin's car? Elmer Wavering and William Lear, ended up taking very different paths in life.

Wavering stayed with Motorola. In the 1950's he helped change the automobile experience again when he developed the first automotive alternator, replacing inefficient and unreliable generators. The invention lead to such luxuries as power windows, power seats, and, eventually, air-conditioning.

Lear also continued inventing. He holds more than 150 patents. Remember eight-track tape players? Lear invented that. But what he's really famous for are his contributions to the field of aviation. He invented radio direction finders for planes, aided in the invention of the autopilot, designed the first fully automatic aircraft landing system, and in 1963 introduced his most famous invention of all, the Lear Jet, the world's first mass-produced, affordable business jet. (Not bad for a guy who dropped out of school after the eighth grade.) Sometimes it is fun to find out how some of the many things that we take for granted actually came into being!

And It all started with a woman's suggestion!

[Thanks to Ray Bailey, N4GYN, for sending me the article text, with the original author unknown. I since found the text of the article I included here from <https://boards.fool.com/the-history-of-the-car-radio-30150454.aspx>.—Ed.]

## ARRL CONTESTING INFO

From ARRL Contest Calendar  
> For more information click the links <  
(no ARRL contests in May)

**June 2020**  
13-15 [June VHF](#)  
20 [Kid's Day](#)  
27-28 [Field Day](#)

**July 2020**  
11-12 [IARU HF World Championship](#)

**August 2020**  
1-2 [222 MHz and Up Distance Contest](#)  
15-16 [10 GHz & Up – Round 1](#)  
16 [Rookie Roundup – RTTY](#)

**September 2020**  
12-13 [EME - 2.3 GHz & Up](#)  
12-14 [September VHF](#)  
19-20 [10 GHz & Up - Round 2](#)

**October 2020**  
10-11 [EME - 50 to 1296 MHz](#)  
19-23 [School Club Roundup](#)

**November 2020**  
7-9 [Nov. Sweepstakes - CW](#)  
21-23 [Nov. Sweepstakes - Phone](#)  
28-29 [EME - 50 to 1296 MHz](#)

**December 2020**  
4-6 [160 Meter](#)  
12-13 [10 Meter](#)  
20 [Rookie Roundup—CW](#)

**January 2021**  
1 [Straight Key Night](#)  
2 [Kid's Day](#)  
2-3 [RTTY Roundup](#)  
16-18 [January VHF Sweepstakes](#)

**February 2021**  
8-12 [School Club Roundup](#)  
20-21 [International DX – CW](#)

**March 2021**  
6-7 [International DX– Phone](#)

**April 2021**  
11 [Rookie Roundup – Phone](#)

For more information:  
<http://www.arrl.org/contest-calendar>

## HAMFEST CALENDAR

**05/15/2020 | [2020 ARRL National Convention at Dayton Hamvention® \(CANCELED\)](#)**

Location: Xenia, OH  
Type: ARRL Convention  
Sponsor: Dayton Amateur Radio Association  
Website: <http://hamvention.org>

**06/06/2020 - [Atlanta Hamfest, ARRL Georgia State Convention 2020 \(CANCELLED\)](#)**

Location: Marietta, GA  
Type: ARRL Convention  
Sponsor: Atlanta Radio Club W4DOC & Kennebogee Amateur Radio Club W4BTI  
Website: <http://atlantahamfest.org>

**06/20/2020 - [Knoxville Hamfest and Electronics Convention, ARRL TN State Convention \(SEE WEBSITE FOR STATUS\)](#)**

Location: Knoxville, TN  
Type: ARRL Convention  
Sponsor: Radio Amateur Club of Knoxville  
Website: <http://WWW.W4BBB.ORG>

**08/22/2020 - 08/23/2020 [Huntsville Hamfest - ARRL Southeastern Division Convention \(SEE WEBSITE FOR STATUS\)](#)**

Location: Huntsville, AL  
Type: ARRL Convention  
Sponsor: Huntsville Hamfest Inc.  
Website: <http://hamfest.org>

For more information: <http://www.arrl.org/hamfests-and-conventions-calendar>  
When searching by division, remember some states adjacent to GA are in different divisions:

Southeastern: GA, AL, FL Delta: TN Roanoke: NC, SC



GARS Events Calendar for 2020				GARS Recurring Calendar							
TechFest ( <a href="http://www.techfest.info">www.techfest.info</a> ) January 18				♦ 2nd Tuesday of the month at 7 pm (except December): Monthly Club Meeting ( <b>online until further notice</b> )							
Winter Field Day January 25&26				♦ 3rd Tuesday of the month at 7 pm (except December): Monthly Workshop ( <b>online until further notice</b> )							
General HamCram TBD				♦ 2nd Sunday of the Month at 2 pm ( <b>suspended until further notice</b> ): <a href="#">GARS Ham Exam Session</a>							
<b>Dog Show Fundraiser</b> Cancelled for 2020				Fire Station #24 2735 Mall of Georgia Blvd Buford, GA 30519							
Georgia QSO Party April 11 (home ops)				♦ Every Monday at 7:30 pm: GARS Want, Swap, Sell, and Information Net on the GARS 147.075 MHz repeater							
North metro area Fox Hunt April				♦ Every Monday at 8:30 pm: ARES Training on the GARS 147.075 MHz repeater							
<b>Memorial Day Parade</b> Cancelled for 2020				♦ Most Saturdays at 7:30 am ( <b>suspended until further notice</b> ): GARS Weekly Breakfast Golden Corral Restaurant 2155 Riverside Parkway, Lawrenceville, GA 30043							
<b>ARC/KARC Hamfest</b> Cancelled for 2020											
Field Day June 27&28											
Tech HamCrams Mar (canceled), Nov											
JOTA October											
Maker Faire TBD											
Stone Mt. Hamfest November 7&8											
Holiday Party December											
<b>June GARS Meeting:</b>  TBD											
GARS CALENDAR OF EVENTS FOR MAY 2020											
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY					
April 26	April 27	April 28	April 29	April 30	1	2	Breakfast at Golden Corral <b>Suspended until further notice</b>				
		7:30 - 8:00 pm GARS 2m Net									
3	4	5	6	7	8	9	Breakfast at Golden Corral <b>Suspended until further notice</b>				
		7:30 - 8:00 pm GARS 2m Net									
10	11	12	13	14	15	16	Breakfast at Golden Corral <b>Suspended until further notice</b>				
<b>GARS VE Team Testing Session (Canceled) MOTHER'S DAY</b>		7:00 - 9:00 pm GARS Meeting ( <b>Online</b> )									
17	18	19	20	21	22	23	Breakfast at Golden Corral <b>Suspended until further notice</b>				
		7:00 - 9:00 pm GARS Workshop ( <b>Online</b> )									
24/31	25	26	27	28	29	30	Breakfast at Golden Corral <b>Suspended until further notice</b>				
	<b>MEMORIAL DAY</b>										

## Metro Testing Sessions

[Please check with each session contact for current status.—Ed.]

GARS publishes Metro Atlanta VE exam schedules as a service and is not responsible for errors or changes. Call and confirm schedules before going. All sessions are walk-in, unless otherwise noted. Take copies of current license and certificate of completed elements with you to all sessions. Find additional sessions online at <http://www.arrl-ga.org>.

### First Sunday, ODD Months

2 pm (Jan, Mar, May, Jul, Sep, & Nov)  
VEC: WCARS  
Braselton Public Utility Building  
4986 Highway 53, Braselton, GA  
Contact: Roger Gibson, WB4T  
(770) 271-4210 or (770) 712-9560  
[w4rlg@bellsouth.net](mailto:w4rlg@bellsouth.net)

### First Sunday, EVEN Months

2 pm (Feb, Apr, Jun, Aug, Oct, Dec)  
VEC: WCARS  
Hall County EOC  
470 Crescent Dr. Gainesville, Ga.  
Contact: Perry Roper, KO4RD  
(770) 536-3056

### Second Saturday

10:00 AM  
Alpharetta North Park, Adult Activities Center  
13450 Cogburn Rd, Alpharetta, GA 30004  
Contact: Ian Kahn, KM4IK  
E-mail: [km4ik.ian@gmail.com](mailto:km4ik.ian@gmail.com)

### Third Saturday, ODD Months

VEC: ARRL  
9:30 am (Walk-ins welcome)  
Stone Mountain Masonic Lodge  
840 VFW Drive  
Stone Mountain, GA 30083  
Contact: Frank Haynes, KV4SP  
Email: [fhaynes@vatmom.net](mailto:fhaynes@vatmom.net)  
(678) 467-3712

### Second Sunday

VEC: W5YI  
2 pm  
Fire Station #24  
Mall of Georgia Boulevard  
Buford, GA 30519  
Contact: Dave Bruse, W4DTR  
E-mail: [exams@gars.org](mailto:exams@gars.org)

### First Sunday, EVEN Months

VEC: WCARS and W5YI  
2 pm @ Barrow Co. Emerg. Serv. Bldg  
66 McElroy Street  
Winder, GA 30680  
Contact: Mike Wolcott, W4WYI  
(404) 281-6581  
E-mail: [W4WYI@ARRL.net](mailto:W4WYI@ARRL.net)  
(cont. next column)

## Ham Exam Results

### April Results

No April VE Session

[As far as we are aware, no VE sessions have been conducted in the Metro Atlanta area in the past 30 days.—Ed.]

GARS VE Team Leaders  
E-mail: [exams@gars.org](mailto:exams@gars.org)

GARS VE Website:  
<http://gars.org/exams>



### Fourth Tuesday

ARRL VEC  
7 pm @ United Way Service Center  
6279 Fairburn Rd., Douglasville  
Contact: Jessie Clower, KB4WFK  
(770) 942-6466

### Fourth Sunday

2:30 pm Georgia Tech  
VanLeer Elec. Building  
Rm. W218, 777 Atlantic Dr.  
For more information go to  
[www.w4aql.com](http://www.w4aql.com) and click on "Test Sessions"

## Metro Club Meetings

[Please check with each club for meeting schedule and method (online, etc.) - Ed.]

### First Tuesday

Kennehoochee ARC  
Fire Station #1, Training Room  
112 Haynes Street, Marietta, GA  
Meeting begins at 7:00pm  
Talk In 146.880(-)

### First Thursday

Atlanta Radio Club  
Georgia Red Cross HQ  
1955 Monroe Dr., Atlanta, GA  
Meeting is at 7:30pm  
Talk In -146.820(-)

### N.E. Georgia ARC

Commerce Public Library  
1344 South Broad Street, Commerce, GA  
Meeting is at 6:30pm  
Talk In - 147.225(+), PL 123.0

### Second Monday

Georgia Tech ARC  
Room W218  
Van Leer Electrical Engineering Bldg.  
Georgia Tech Campus  
Meeting at 7:00pm

Sawnee Amateur Radio Association  
Beaver Toyota  
1875 Buford Highway, Cumming, GA  
Meeting at 6:30

### Second Thursday

Alford Memorial Radio Club  
Annistown Road Baptist Church  
Annistown Rd & Spain Rd  
Stone Mountain, GA  
Dinner at 6:00pm, Meeting at 7:30pm  
Talk In - 146.760(-)

### Second Saturday

North GA QRP Club  
Board Room of The Shepherd Center  
2020 Peachtree Rd, NW, Atlanta, GA  
at 10:00 AM

### Third Tuesday

North Fulton Amateur Radio League  
Alpharetta Recreation & Parks Dept.  
Alpharetta Adult Activity Center  
13450 Cogburn Road, Alpharetta, GA  
meeting at 7:30pm  
Talk In - 145.47(-)

For more information, go to:  
<http://www.gars.org/>

[Note: No store access; curbside delivery available until further notice. - Ed.]

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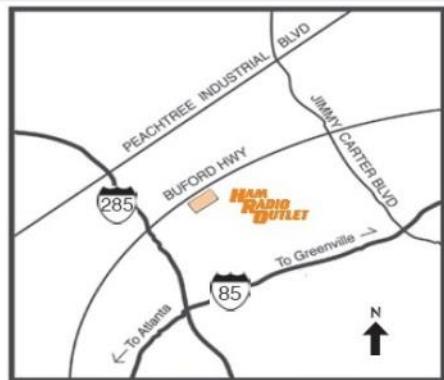
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